

no. 6991 (G); pinelands west of Punta Gorda, DeSoto Co., Small, Mosier & DeWinkler, no. 10912 (NY, TYPE of *R. pinetorum* Britton & Small); in moist sandy ditch along roadside, Rialto, Lee Co., Moldenke, no. 1011 (D, NY); glade, Cutter & Black Pt., Dade Co., Small & Carter, no. 885 (P); swampy thicket, Washington Co., May, Curtiss, no. 3149 (NY). LOUISIANA: low prairies, Jennings, Jefferson Davis Parish, Palmer, no. 7624 (Mo, P, US). CUBA: Colpothrinax savanna between Pinar del Rio and Caloma, Pinar del Rio, Britton, Britton & Cowell, no. 10084 (NY). JAMAICA: along rivulets at Moneague, 1850, Alexander (G).

R. pinetorum Small is superficially identical with the weaker state of *R. globularis*, var. *recognita* found in the western States and the Greater Antilles. It has the same attenuated appearance, the same weak cymes, turgid spikelets, inconspicuous bracts and nearly orbicular short scales. Even its achene is similar in shape, size and tubercle. Its only claim to specific rank depends upon the surface sculpturing of the achene. This consists of a brown nearly isodiametric reticulation over a flat, usually pale background. *R. globularis* and the var. *recognita* have, by contrast, an elongate reticulation with the shorter sides of the alveoli accentuated so as to form transverse ridges on the surface of the achene. A study of the whole *globularis*-complex in Florida and Cuba, however, reveals that in this region transitional stages between isodiametric and elongate pitting with a ridged surface occur. Such are the achenes from the collection of Tracy, no. 7001, from Florida, and of Curtiss, December, 1903, from the Isle of Pines. It seems best, therefore, to reduce Small's entity to the status of a variety.

(To be continued)

CONTINENTAL DRIFT AND PLANT DISTRIBUTION.—Under this title Dr. Douglas Houghton Campbell¹ has privately issued a pamphlet which all students of geographic botany should have for their shelves. Whether it is wholly convincing will depend on the individual reader, for the subject is a vast, contradictory and somewhat illusive one, too often discussed by those who wishfully think their facts without too much embarrassing checking of the data. This tendency of the present author was noted by me in *Ecology*, vii. 510–516 (1926). At that time I wrote: "As to cranberries and Lapland rhododendron, shrubs very particularly selected by Campbell as typical of 'this northernmost zone of vegetation [the Arctic],' it is not very reassuring to one's confidence in his judgment to find that the cranberry, *Vaccinium*

¹ DOUGLAS HOUGHTON CAMPBELL, *Continental Drift and Plant Distribution*. Privately printed, pp. 43. 1943.

Oxycoccus, does not extend north in America even to the southern edge of the Arctic Archipelago and that in Greenland it does not extend north to the Arctic Circle; and that on the Arctic Archipelago *Rhododendron lapponicum* is known only in eastern Baffin Land and there extends only three or four degrees north of the Arctic Circle." At that time I tried to help by presenting a considerable list of *real* Arctic plants; but these have been ignored and in the new publication we again read: "Most of arctic America and Eurasia . . . have many lakes, swamps, and tundras . . . among which low prostrate shrubs, like cranberries, rhododendron . . . may grow." They may but usually they don't! And as for the imagined "arctic America" with "many lakes, swamps", etc., I quoted Steffanson and Simmons on the extreme ARIDITY of the Arctic and noted the essential lack on the Arctic Archipelago and in arctic Asia of hydrophytes and paludal groups (*Epilobium*, etc.). All that fell undigested into Campbell's waste pile.

Chatting lightly, and with illustrations drawn only from writings nearly a century old, the author tackles the eastern Asiatic-eastern American relationship, without any apparent realization that further and much more complete studies have changed some of the specific and even generic identifications. Thus, the nine species selected as "identical" in "Japan and the Eastern United States" include "*Anemone pennsylvanica*, *Rhus toxicodendron*, *Vitis labrusca*, *Spiraea betuliflora*, . . . *Aralia quinquefolia* (Ginseng)". Now to facts: *Anemone canadensis* L. (*A. pennsylvanica*) is strictly North American, the Asiatic plant, *A. dichotoma*, being a separate species—See Gray, Syn. Fl. i¹. 12 (1895). True *Rhus Toxicodendron* is restricted to the coastal plain of the southeastern United States—See Fernald, RHODORA, xliii. 597, t. 685 (1941), the Japanese shrub being a relative of our transcontinental *R. radicans*. As to *Spiraea betulifolia* (*betuliflora* of Campbell being an evident *lapsus calami*), no one now considers our Alleghenian shrubs, *S. corymbosa* and *S. virginiana*, as conspecific with it. As to the Japanese vine which a century ago was thought to be the eastern North American *Vitis Labrusca*, the relationship is only superficial. The eastern North American *V. Labrusca* has continuous tendrils (a tendril or inflorescence opposite each leaf); the Japanese species once confused with it has the tendrils intermittent. It is *V. Coignetiae* Pulliat ex Planchon (1883), and its tiny grapes (less than 1 cm. in diameter) would look pretty poor to those who know true *V. Labrusca* with its berries 1.5–2.5 cm. broad. And when we come to "*Aralia quinquefolia* (Ginseng)" it is lucky that the colloquial name is given. The Ginsengs belong to so distinct a genus, *Panax* L., that no one since a very archaic period in taxonomy has merged them with *Aralia*. Furthermore, to get right down to the root of the matter, *Panax quinquefolium* of eastern North American forests has a simple or forking parsnip-like vertical root, the Japanese plant, *P. repens*, having a long and creeping horizontal rhizome. The relationship is only a generic one.

Passing to the Southern Hemisphere we get to a vast area unfamiliar to the reviewer, but we note (p. 16) such flat assertions as "The presence in Chile of such a striking New Zealand species as *Sophora tetraptera*, as well as three species of *Fuchsia*, a genus found elsewhere only in South America, makes it pretty certain that there must have been some much more intimate connections than now exist between South America and New Zealand." Obviously; what about Antarctica, which seems not to have registered? But why omit the two score of North American species of *Fuchsia*? Aren't they also a part of the genus?

And why in the very next paragraph include *Dichondra repens* as one of the species "common to Chile and New Zealand"? It is also common elsewhere. As early as 1845 Choisy, in DC. Prodr. ix. 451, included in its range Mauritius, the Cape of Good Hope and the East Indies, and correctly treated *D. carolinensis* Michx. as a variety of it. In one or more of its variations *D. repens* comes up through Mexico to California and Texas; thence it follows the coastal

plain way around to Virginia. "Chile and New Zealand" have no monopoly of it.

Altogether one cannot escape the conviction that the author of "Continental Drift and Plant Distribution" has simply plucked here and there, especially from early and outgrown sources, without any clear understanding of identities and actual geographic ranges. Any deductions drawn from such haphazard and wholly misunderstood data must be very doubtful. Unless an author takes pains to get his fundamental facts accurate he can expect to be followed only by those who do not know the difference. Some years ago an enthusiastic advocate of continental drift¹, who out-wegenered Wegener, found that the school-child's game of cutting out from maps and shoving together the continents left him puzzled to fit the large and irregular island of Newfoundland into the picture. The problem was solved (Baker, maps after p. 28) by obliterating the Bay of Biscay, swinging the Iberian Peninsula northward opposite Greenland and shoving Newfoundland into the broadened outlet of the Mediterranean. In so doing the imaginative reconstructor ignored the fact that much of the rim of the Gulf of St. Lawrence (southwestern Newfoundland, Cape Breton and northern Nova Scotia, the Magdalen Islands, Prince Edward Island and the Gaspé Peninsula) is characterized by homogeneous beds of gypsiferous Carboniferous deposits, and that the Gulf is supposed to have been formed by the breaking down of such relatively soluble areas. Newfoundland started where it still exists; but many of my published maps of transatlantic identities were used as proof of the trip across the Atlantic, for Newfoundland shares many Atlantic European species. There you are! I remember writing a friend at that time that some important points had been overlooked: an island on the eastern coast of Newfoundland is Baccalieu (Portuguese *bacalháo*, the codfish), two small ports on the Avalon Peninsula are Biscay Bay and Portugal Cove, and everyone entering Newfoundland from Cape Breton must pass the customs at Port aux Basques. The antiquity in their present positions of Iberia, Newfoundland and other marginal lands, with characteristic lithological structure, continuous geological histories and well demonstrated endemism of fauna and flora, are only a few of the many embarrassing matters which ardent enthusiasts ignore in their espousal of continental drift.—M. L. F.

THE ALBINO OF *EPILOBIUM LATIFOLIUM*.—The handsome circumpolar *Epilobium latifolium* L., or RIVER-BEAUTY, ordinarily has roseate or purplish petals, but occasionally colonies with whitish petals and pale sepals, an obvious albino, are found. Although this albino is passing as *E. latifolium*, forma *albiflorum*, I am unable to find that that patently descriptive name has the status of more than a mere *nomen*; no proper and required diagnosis of it seems to have been published. The name, merely as a name, was published by Nathorst in Öfvers. Kgl. Sv. Vidensk.-Akad. Förh. 46 (1884) in an enumeration of plants of northwest Greenland:

Epilobium latifolium L. f. *albiflora*.

That was all, except a note of the station. This name, with various inaccuracies interpolated, has been generally used for the

HOWARD A. BAKER, *The Atlantic Rift and its Meaning* (1932).